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ABSTRACT

Project CERCA (Career Exploration through Reinforcement of Correlated Academics) at Flushing High School (New York) seeks to improve English language proficiency and performance in the academic content areas, to help develop native language skills, and to instill career awareness. The project serves a target population of Hispanic students, most of them with limited English proficiency (LEP). During its second year, instructional offerings were continued in four major areas: English as a second language, native language arts, content-area courses, and advanced placement courses; audio-visual programs were established; average ESL class sizes were reduced from 33 to 25 students; staff received in-house training for instituting the Metropolitan Guidance and Career Service System (METRO-Guide)--an interactive computerized system offering up-to-date and on-going career and college data to students; and more career capsule units were introduced. CERCA's strengths lie in its wide selection of course offerings geared toward career awareness; the preparation it provides students for using bilingual skills; and its commitment to include such technological advances as the METRO-Guide. To further strengthen the program, recommendations include hiring a bilingual grade advisor and an additional bilingual science teacher, and monitoring the implementation of bilingual instruction in the classrooms. (ETS)

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FLUSHING HIGH SCHOOL

PROJECT CERCA

1984-1985

OEE Evaluation Report

O.E.A. Evaluation Section Report

Robert Tobias, Administrator of Evaluation
Judith S. Torres, Senior Manager

Grant Number: G00-830-2800

FLUSHING HIGH SCHOOL

PROJECT CERCA

1984-1985

Principal:
Mr. James Costaras

Project Director:
Ms. Eileen May

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A SUMMARY OF THE REPORT

The Title VII project at Flushing High School, originally funded in September 1983, has completed its second year of operation. Career Exploration through Reinforcement of Correlated Academics (CERCA) is a three-year project that is an outgrowth and further expansion of an earlier tax-levy bilingual program and the Title VII-funded 1980-1983 project, which involved a basic trilingual program. The current project's unique feature was to incorporate a career orientation focus into targeted classes in English as a second language (E.S.L.) and native language arts (N.L.A.).

During the project's second year, instructional offerings were continued in four major areas: E.S.L., N.L.A., content-area courses, and advanced placement course offerings (for gifted bilingual students).

Highlights of the year's activities were the establishment of audio-visual week programs that utilized a rich variety of audio-visual and library resource materials made available through the program, reduction of the average E.S.L. class size from 33 to 25 students, in-house staff training for instituting METRO-Guide, and introduction of more career capsule units.

To further strengthen the program, it is recommended that a bilingual science teacher be added, that an additional staff member be hired as a bilingual grade advisor, and that the supervisor of the program monitor more closely how bilingual instruction in the classrooms will be implemented.

Program objectives were assessed in English language achievement (Criterion Referenced English Syntax Test [CREST], the New York City Reading Test, and the Language Assessment Battery); mathematics, science, and social studies (teacher-made tests); awareness of career alternatives (the Career Development Survey and a review of student records); and mainstreaming (program records). Quantitative analysis of student achievement data indicates that:

--Students tested with all levels of the CREST did not reach the proposed objective for CREST mastery -- that 75 percent of the students would master one objective per month of instruction.

--Overall, the students made statistically significant gains on the New York City Reading Test, thus meeting the proposed objective.

--The program objective for LAB performance was met; of the 200 LEP students targeted, 88 (44 percent) passed the twenty-first percentile during 1984-85. This performance surpassed the 15 percent passing criterion proposed as program objective.

--The program objective for content-area achievement (75 percent passing rate) was met overall in science and social studies.

--Overall, the program objectives in career awareness were met.

--The program objectives for mainstreaming were met: 18 percent of the students entered all-English instructional programs and 55 percent of the students were enrolled in at least one mainstream class.

Funding has been approved for 1985-1986, Project CERCA's third and final year. A slight change of scope and some budget modifications will take place in the program's last year. These proposed changes have received approval from the U.S. Department of Education and will be implemented in September 1985. The major change involves the introduction of a METRO-Guide Career Service System, aimed at meeting the career education and guidance objectives of the program.

ACKNOWLEDGEMENTS

The production of this report, as of all O.E.A. Bilingual Education Evaluation Unit reports, is the result of a cooperative effort of permanent staff and consultants. In addition to those whose names appear on the cover, Margaret Scorza has reviewed and corrected reports, coordinated the editing and production process, and contributed to the quality of the work in innumerable ways. She has been assisted by Eulalia Cabrera who has interpreted findings and integrated material into reports, and by Ken Goodall who has edited reports. Patricia Fitzpatrick has spent many hours creating, correcting, and maintaining data files. Finally, Joseph Rivera has worked intensively to produce, correct, duplicate, and disseminate reports. Without their able and faithful participation, the unit could not have handled such a large volume of work and still produced quality evaluation reports.

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PROJECT CERCA

FLUSHING HIGH SCHOOL

Location:	35-01 Union Street Flushing, New York 11354
Year of Operation:	1984-1985, second year of funding
Target Population:	200 LEP students participating fully, 115 Hispanic mainstream students participating partially
Languages of Instruction:	English and Spanish
Principal:	Mr. James Costaras
Project Director:	Ms. Eileen May

I. OVERVIEW

Project CERCA (Career Exploration Through Reinforcement of Correlated Academics) is a three-year, federally funded Title VII grant program designed to disseminate career information to students at Flushing High School within certain targeted classes in English as a second language (E.S.L.) and native language arts (N.L.A.). In its second year of funding, the program served a target population of 200 Hispanic students of limited English proficiency (LEP) and 115 other Hispanic mainstream students who were part-time participants. The latter students received N.L.A. classes and career orientation. This second-year evaluation report is based on an examination of program materials and records, site visits, classroom observations, and interviews with school personnel.

Program goals are to improve students' English language proficiency and performance in the content areas (mathematics, science, and social studies), to help them develop their native language skills, and to instill career awareness. The program was designed to enhance the

students' self-image, sense of belonging, and motivation to succeed in a career of their choice.

The CERCA acronym suggests the Spanish term for a time near at hand. Thus it emphasizes the immediacy of the students' high school graduation and their need to establish a career direction. Students are encouraged to explore the options available to them and to develop and use their talents.

The career orientation focus will be provided through the Metropolitan Guidance and Career Service System (METRO-Guide). METRO-Guide is a computerized service that offers up-to-date and on-going career and college data through an interactive system for students. It will be used exclusively by the Title VII program to determine students' career aptitude and interest. Additional staff training is being provided to the project director, the bilingual guidance counselor, and program teachers in the use of METRO-Guide.

SITE CHARACTERISTICS

Flushing High School is located at the intersection of Northern Boulevard and Union Street in Queens, New York. Many Hispanic students live in the surrounding neighborhoods of Corona and Jackson Heights. The creation of a bilingual program made Flushing a magnet school to which feeder schools send their unserved LEP students.

PROGRAM ORGANIZATION

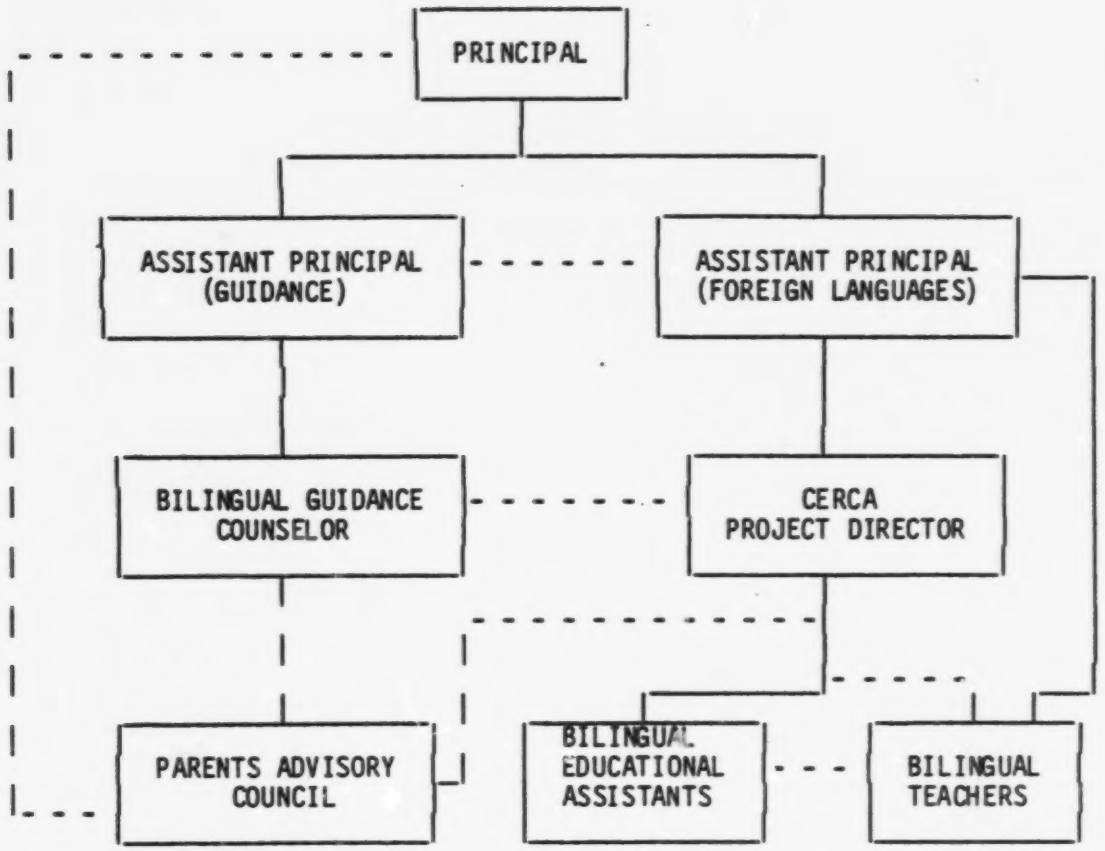
CERCA is organized under the auspices of the Foreign Languages/ E.S.L./Bilingual Education Department. The assistant principal (A.P.) for this department supervises the CERCA project director, its 12 teachers, and its two Title VII educational assistants. The Title VII bilingual guidance counselor is supervised by the A.P. of Guidance and maintains communication with the supervisor of the instructional program.

The principal, a former assistant principal of foreign languages, conducts periodic observations of lessons. Both the principal and the assistant principal periodically review strengths and weaknesses of individual instructors by holding post-observation conferences.

Figure 1 presents the CERCA organizational chart.

FIGURE 1

Project CERCA Organization Chart



_____Supervision

----------Collaboration and Communication

Full cooperation between the school's guidance services and its foreign languages department is noteworthy. The project director and the bilingual guidance counselor have coordinated plans to implement the program's career orientation focus and to organize and supervise parents' advisory council meetings. The principal, the A.P. of Foreign Languages, and the A.P. of Guidance have played an active role here as well, attending and addressing several of the parents' meetings.

The project director has overall responsibility for coordinating all phases of the Title VII project. She provides the necessary articulation between the program and the mainstream. She has expertise in business administration. Her experience was valuable in designing career capsule units and obtaining guest speakers on targeted career topics. As a former language teacher within the department, she was also familiar with the situation confronting classroom teachers. The project director assists in coordinating staff development activities and the A.P. supervises instruction offered by content-area teachers.

In keeping with the school's demonstrated commitment to bilingual education, it has a tax-levy bilingual grade advisor, in addition to a full-time Title VII Bilingual Guidance Counselor who serves as college advisor.

FUNDING

Project CERCA relies mainly on Title VII and tax-levy funding. Additionally funding is provided by New York State P.S.E.N. and New York City Module 5B. Staff members supported by Title VII funds include the

project director, the bilingual guidance counselor, and the two educational assistants. The 12 teacher positions are supported by tax-levy funds.

STUDENT CHARACTERISTICS

The total 1984-1985 school enrollment at Flushing was 2,002 students, about 900 of whom spoke only English as their home language. More than one fourth of the students (563) were of Hispanic origin. Some 330 students were identified as LEP.

Nearly 80 percent of the program students were recent immigrants, most of them from the Dominican Republic (see Table 1). They had poor command of English and many lacked prior schooling. Fifty-three percent of the program students were female; yet male students outnumbered females in every grade except grade ten. Most of the students were ninth or tenth graders (36 percent each), while twelfth grades comprised only nine percent of the program population. Tables 2 and 3 present information about program students age and grade, and time spent in the bilingual program.

According to the project director, the students enrolled in the program had higher attendance rates than non-program students. She also reported the school's drop-out rate as 8.3 percent. According to information reported to the Office of Educational Assessment, 13 students dropped out of the program during the academic year, a dropout rate of four percent. Table 4 presents other reasons why students left the program.

STAFF CHARACTERISTICS

The project director had extensive experience teaching native language arts courses. The bilingual instructional staff and educational assistants had an average of 15 years experience in education, with nine years in bilingual education. The E.S.L. staff (with the exception of two recent E.S.L.-trained teachers) had an average of 15 years' experience, with four years in bilingual education. Appendix A summarizes the characteristics of the program's professional and paraprofession staff members.

TABLE 1

Number and Percent of Program Students by Country of Birth

Country of Birth	Number	Percent
Dominican Republic	123	39
United States	51	16
Colombia	47	15
Central and South America (country unspecified)	35	11
Puerto Rico	27	9
Ecuador	27	9
Cuba	2	less than 1
Unknown	2	less than 1
Spain	1	less than 1
TOTAL	315	100

NOTE: The project served 200 LEP students who received full services and 115 mainstream non-LEP Hispanic students who received partial services.

- Thirty-nine percent of program students were born in the Dominican Republic.
- Sixteen percent of program students were born in the United States.

TABLE 2

Number of Program Students by Age and Grade

Age	Grade 9	Grade 10	Grade 11	Grade 12	Total
14		1	0	0	15
15			0	0	67
16	29			0	74
17	15	26			70
18	8	16	18		55
19	1	7	9	6	23
20	1	2	1	1	5
21	0	0	1	0	1
TOTAL	111	111	60	28	310
Overage Students					
Number	54	51	29	7	141
Percent	49	46	48	25	45

Note. Shaded boxes indicate expected age range for grade.

- Forty-five percent of program students were overage for their grade placement.
- Grade twelve had the lowest percentage (25 percent) of overage students, while grade nine had the highest (49 percent).

TABLE 3

Time Spent in the Bilingual Program[a]

(As of June 1985)

Time Spent in Bilingual Program	Number of Students Grade 9	Grade 10	Grade 11	Grade 12	Total
<1 Academic Year	7	1	1	0	9
1 Academic Year	82	58	12	3	155
2 Academic Years	23	44	44	20	131
3 Academic Years[b]	0	7	3	2	12
4 Academic Years[b]	0	1	0	3	3
TOTAL	112	111	60	28	311

[a]Rounded to the nearest year.

[b]Reflect participation in previous bilingual program.

- One hundred thirty-one students (42 percent) had completed two years in the program.
- One hundred sixty-four students (53 percent) were new to the program in its second year of operations. While 15 had been served by previous bilingual programs.

TABLE 4

Number of Students Leaving the Program

Reason For Leaving	Grade 9	Grade 10	Grade 11	Grade 12	Total
Transferred to another school or program in U.S.	11	8	7	1	27
Graduated	0	2	0	0	2
Left the U.S.	2	2	3	1	8
Discharged (Job)	1	0	0	0	1
Dropout (Unknown Reasons)	4	5	3	1	13
TOTAL	18	17	13	3	51

- Fifty-one students (16 percent) left the program during the academic year.
- Of those who left, 27 students transferred to another school or program in the U.S.
- Thirteen students (4 percent) dropped out of the program for unknown reasons.

II. INSTRUCTIONAL OFFERINGS

According to the project director, program participants were progressing well: 76 percent passed most of their courses during the fall semester. These students were enrolled in double class periods of E.S.L., bilingual content-area courses, and a sequence of required N.L.A. instruction. In line with recommendations made in last year's evaluation report, the average E.S.L. class size dropped from 33 to 25 students.

Most program students in the ninth, tenth, and eleventh grades were in bilingual classes. Some mainstreaming occurred, but it was done on an individual basis. In ninth and tenth grades, about five to ten percent of the program students were going into the mainstream. Most of the mainstreaming was done in the eleventh grade. The guidance counselor reported that by the eleventh grade, at least 50 percent of program students who had attended Flushing since the ninth grade were mainstreamed to two or three content-area classes.

ENGLISH AS A SECOND LANGUAGE

--By the end of the project period, 75 percent of program students will demonstrate improved skills in English syntax as measured by mastery of at least one CREST objective per 20 days of instruction.

--By the end of the project period, 75 percent of participating eleventh and twelfth graders will demonstrate growth in reading ability in the English language as measured by a gain at or below the .05 level of significance on the N.Y.C. Reading Test.

--By the end of the project period, 15 percent of the program students will achieve proficiency in English as measured by a score on or above the twenty-first percentile on the English version of the Language Assessment Battery post-test.

Students were placed in E.S.L. classes on the bases of their Language Assessment Battery (LAB) scores, individual placement examinations, and counselor or E.S.L. teacher recommendations. All programs students were required to enroll in double periods of E.S.L. classes on a daily basis and to take the entire sequence of six courses plus transitional English, unless they were placed above the beginning level. Several students were able to begin with E.S.L. 3. Appendix B lists E.S.L. offerings for the fall and spring terms. All courses met two periods a day except E.S.L. 5 through 7, which were one period a day.

Student Performance on the CREST

The assessment instrument used to evaluate the first objective in this area was the Criterion Referenced English Syntax Test* (CREST). The CREST was developed by the New York City Public Schools to measure mastery of the syntax skills presented in the E.S.L. curriculum. The CREST uses four items to measure each skill, and mastery is achieved when three of the four items are answered correctly. The test has three levels: beginning (1), intermediate (2), and advanced (3). Levels 1 and 2 each measure mastery of 25 skills, while level 3 measures mastery of 15 skills.

Table 5 presents the test results for students who were pretested and posttested with the same level. Complete data (levels, pretest

*Extensive information on CREST syntax skills and psychometric properties are in the Technical Manual, New York City English as a Second Language Criterion Referenced English Syntax Test. Board of Education of the City of New York, Division of High Schools, 110 Livingston Street, Brooklyn, New York 11201.

score, and posttest score) were available for 81 students in the fall and 101 students in the spring who were reported to be taking E.S.L. classes. The program objective was not met. It must be noted, however, that the criterion set (75 percent of the population mastering at least one objective per month) is higher than the typical achievement of students in bilingual programs citywide. The citywide performance of students on the CREST indicates that less than 70 percent of the students are able to master one objective per month of instruction. Therefore, most bilingual programs aim at an average mastery of one CREST objective per month. Had CERCA aimed at a similar objective, the results (see Table 6) show that, on the average, students mastered more than one CREST objective per month each semester.

TABLE 5

Proportion of Students Gaining One Objective per Month on the Criterion Referenced English Syntax Test

Semester	Test Level	Number of Students	Percentage Gaining at Least One Objective per Month
Fall	1	40	62.5
	2	19	36.8
	3	18	44.4
Spring	1	25	17.0
	2	21	20.0
	3	19	--

•The program objective -- that 75 percent of the students would master at least one CREST objective per month of instruction -- was not met at any level, either semester.

TABLE 6

Results of the Criterion Referenced English Syntax Test

Test Level	Number of Students	Pretest Mean	Pretest S.D.	Posttest Mean	Posttest S.D.	Mastery* Mean	Mastery* S.D.	Mean Mastery Per Month
				FALL				
1	42	7.8	5.5	12.4	5.5	4.6	3.2	1.4
2	20	13.7	6.6	16.8	5.7	3.1	2.3	0.9
3	19	8.4	2.4	11.9	2.4	3.5	2.6	1.0
TOTAL	81	9.4	5.3	4.0	5.3	4.0	2.9	1.2
				SPRING				
1	50	9.3	6.3	14.5	6.7	5.2	3.8	1.8
2	27	10.2	5.5	16.8	5.2	6.5	3.1	2.2
3	24	10.9	2.5	12.3	1.7	1.5	1.3	0.5
TOTAL	101	9.9	5.4	14.6	5.7	4.7	3.7	1.6

*Posttest minus pretest.

•Overall, students mastered more than one CREST objective per month in both the fall and spring.

Student Performance on the New York City Reading Test

The New York City Reading Test was administered to assess the program's second objective in English language achievement. Raw scores were converted to Normal Curve Equivalent (N.C.E.) scores, which are normalized stardard scores. They have the advantage of forming an equal interval scale so that scores and gains can be averaged. For the norming population, N.C.E.s have a mean of 50, a standard deviation of approximately 20, and a range from 1 to 99. Thus scores can be compared to the norming population. Because N.C.E.s are based on the norm group's scores, students must gain at the same rate as the norm group to stay at the same N.C.E. Therefore, an N.C.E. gain, no matter how small, indicates improvement greater than that of the norm group, and a gain of 7 N.C.E. points has been considered exemplary in Chapter I program.

Students' pretest and posttest N.C.E. score means and standard deviations are presented in Table 7. Data on both test administrations were available for 30 eleventh- and twelfth-grade program students. Statistical significance was determined through the application of the correlated t-test model to demonstrate whether the difference between pretest and posttest means is larger than would be expected by chance variation alone. The analysis was conducted by using all students who had both pretest and posttest scores.

Examination of Table 7 reveals that the objective was met. There was a significant gain ($p<.05$) between pretest and posttest scores. On the average, eleventh and twelfth graders gained approximately 22 N.C.E. points. This exemplary achievement in reading ability shows an improvement from last year, when this same objective was not met.

The proportion of students who made actual gains is also presented for descriptive purposes. Of all students taking the New York City Reading Test (P.S.E.N.), 98 percent made actual gains. The highest proportion of student making gains were in grade ten (100 percent), followed by grades 11 and 12 (93 percent).

Student Performance on the LAB

Of the 200 LEP students targeted, 77 surpassed the twenty-first percentile on the LAB in the fall of 1984 and 11 surpassed it in the spring of 1985. This comprises a total of 88 students (44 percent) surpassing the twenty-first percentile during the 84-85 school year, thus meeting the program objective.

TABLE 7

Results of the New York City Reading Test

Grade Level	Number of Students	Pretest Mean	Pretest S.D.	Posttest Mean	Posttest S.D.	Mean Difference	Proportion Making Gains
9	4	47.2	13.5	48.2	30.2	1.0	50.0
10	11	45.3	5.5	74.7	17.5	29.5**	100.0
11	15	32.9	14.9	56.8	24.4	23.7**	93.0
12	15	39.1	9.0	59.6	16.7	20.5**	93.0
TOTAL	45	39.3	12.0	61.4	21.9	22.1**	98.0

**statistically significant at the .01 level.

- The program objective was surpassed: more than 75 percent (93 percent) of eleventh and twelfth graders made a significant (p.05) increase in reading achievement.

- Ninety-eight percent of all students who took the New York City Reading Test (P.S.E.N) made actual gains. Tenth graders had the highest proportion of students making gains (100 percent), and ninth graders had the lowest (50 percent).

NATIVE LANGUAGE ARTS

Although the program did not propose an objective in this area, N.L.A. courses were offered which ranged from introductory to advanced levels. Appendix C lists the N.L.A. offering for the fall and spring terms. All classes met for one period a day, and the class register included only program students.

CONTENT-AREA COURSES

--By the end of the project period, 75 percent of participating students will demonstrate improvement in math, science, and social studies as measured by a passing grade on a teacher-constructed culminating exam.

Bilingual instruction was offered to program students in the three content areas. Appendix D list these mathematics, science, and social studies courses. All classes were limited to program students, and the English was used for instruction in all classes about ten percent of the time, according to the project director.

The project director and the assistant principal were in agreement on the ultimate aim of bilingual classes, which was to facilitate the development of knowledge and skills in the content areas as well as fostering the acquisition of English. Both agreed that new terms and vocabulary items were introduced in English in the content-area classes. The assistant principal noted that students were grouped heterogeneously according to English language skills in content-area classes and homogeneously according to English level of ability in E.S.L. classes. A gradual progression in use of English took place across the levels of subject-area instruction.

In classroom observations, a member of the evaluation team noted a great deal of variation among the subject areas. The percentage of class time allocated to each language ranged from approximately 50 percent in civics, to 65 percent Spanish/35 percent English in math fundamentals, to nearly 100 percent Spanish in world history. These variations reflect the distribution of languages for instruction as proposed.

Student Achievement in Content-Area Courses

Table 8 presents the passing rates for program students in mathematics, science, and social studies courses each semester. A weighed average for the year was also computed.

Examination of Table 8 reveals that the objective was met for both science and social studies courses. The lower passing rate achieved by students in mathematics suggests that the program review the criterion set for this subject and determine if it was set too high for this population.

TABLE 8

Passing Rates in Mathematics, Science, and Social Studies Courses Taught Bilingually

Course	Fall		Spring		Overall Passing Rate
	Number of Students	Percent Passing	Number of Students	Percent Passing	
Math[a]	206	70.4	207	62.8	66.6
Science[b]	210	72.2	223	75.8	75.9
Social Studies[c]	229	73.4	242	76.9	75.2

[a]Bilingual math ranges from fundamental math to algebra courses.

[b]Bilingual science ranges from general science to biology courses.

[c]Bilingual social studies includes global history, American history, economics, and civics for new Americans.

•Overall, the program objective was met by students in science and social studies courses.

CAREER EXPLORATION UNITS

--By the end of the project period, 75 percent of program participants will demonstrate greater awareness of career alternatives as measured by:

a. attendance at a minimum of four group career counseling sessions and two individual career counseling sessions;

b. pretest and posttest scores on the Career Development Survey of the Office of Occupational and Career Education, N.Y.C. Board of Education;

c. passing scores on a least two career capsule unit tests in E.S.L. or native language arts.

Part a. of the above program objective was achieved. According to the project director, 100 percent of the program participants attended four career assemblies, at least two career lectures (in class) by guest speakers, and two individual career counseling sessions each semester. Part b. was also achieved: of the 164 students who took both the pretest and posttest, 139 students (85 percent) improved their scores. The part c. objective was not achieved since of 100 students tested, 40 passed (40 percent) in the fall and of 120 students tested in the spring, 38 passed (31.7 percent).

--By the end of the project period, 75 percent of all eleventh and twelfth graders participating in the program will have achieved greater vocational goal clarification as measured by:

a. the selection in the junior year of a Career Cluster Concentration;

b. the selection in the junior year of an area of academic concentration;

c. the existence for each graduating senior of an Individual Career Plan (I.C.P.).

Career orientation activities included two audio-visual week programs, career assemblies, guest speakers, and field trips. Careers explored included public service, marketing, manufacturing, and transportation. One field trip was to Kennedy Airport, where students had an opportunity to talk with pilots and other personnel.

The audio-visual weeks were initiated this year to take advantage of the bilingual program's rich and extensive audio-visual library. It includes materials that can be easily incorporated into content-area courses and N.L.A. classes. Thus, career topics covered in these classes were accompanied by audio-visual materials, selected on a weekly basis from the library.

Table 9 lists the N.L.A. and E.S.L. classes targeted for career orientation for the fall and spring terms, respectively.

Guests spoke to program students at career assemblies. Their talks generally included a discussion of the nature of the career field, job responsibilities, rewards, salary expectations, on the job training, special skills required such as a second language, and the prospects of advancement.

According to the project director, all eleventh and twelfth graders discuss their post-high school plans with the guidance counselor who emphasizes the importance of continued education. Individual career plans (I.C.P) are then reviewed with senior students. One hundred percent of the seniors had an I.C.P. These activities indicate that the program objectives in this area were met.

TABLE 9

Career Topics in Program Classes

Course Title (Level)	Topic
E.S.L. 3 (II)	Introduction to the World of Work
E.S.L. 4 (II)	Careers in the Computer Field
E.S.L. 5 (III)	Careers in Electronics/Communications
E.S.L. 6 (III)	Job Search Skills
E.S.L. 7 (Transitional English)	Careers in Public Service
N.L.A. 1/2 (I)	Office Careers for the Bilingual (Fall) Health Careers for the Bilingual (Spring)
N.L.A. 3/4 (II)	Careers in Transportation (Fall) Careers in Education (Spring)
N.L.A. 5/6 (III)	Careers in Manufacturing and Marketing (Fall) College and Careers (Spring)

SPECIALIZED COURSES

A wide selection of academic and elective specialized courses were available to program students, providing additional exposure to English. Each student was enrolled in at least two elective courses. Appendix E lists all specialized courses in which at least ten program students were enrolled. English was used in all these classes.

III. NON-INSTRUCTIONAL SERVICES

STAFF DEVELOPMENT

--By the end of project, 25 percent of program teachers and staff will have improved their ability to teach career skills as measured by the successful completion of at least one college course in computers, data or word processing, stenography, or other vocational skill area.

--By the end of the project period, 50 percent of program teachers and staff will have improved their ability to develop career-oriented lessons and curriculum as measured by participation in a supervised, after school, career curriculum project.

--By the end of the project period, 90 percent of program teachers and staff will have an improved understanding of the goals and importance of career education as measured by attendance at a minimum of four departmental conferences devoted to the theme of Career Education for the Bilingual.

Staff development activities included attendance of all program teachers and staff members at regularly scheduled departmental meetings, which were held after school, and at the two audio-visual week programs. Three program teachers completed university courses. The project director attended workshops and a symposium on bilingual education.

CURRICULUM DEVELOPMENT

The career exploration units of Project CERCA were designed to introduce students to career alternatives. The units were selected on the basis of compatibility with the E.S.L. and N.L.A. curricula, teacher interest, available materials, and employment opportunities in the New York City area. Because their aim was to reinforce language skills relevant to specific careers, a major focus was on the development of reading, writing, speaking, and vocabulary skills in both English and Spanish.

This year's program accomplishments included the translation of the Junior College Bulletin into Spanish. This work was completed in preparation for a college orientation meeting for eleventh-grade students. Also completed this year were materials on METRO-Guide service, college and careers, public service jobs, and the computer field. Three lesson plans were developed on each of 11 career topics. Materials in four other areas were in the process of development.

SUPPORTIVE SERVICES

Based on the students' expressed interests and their levels of ability in English, the project director (working in conjunction with the bilingual guidance counselor) recommends them to a New York State employment counselor and often assists them in filing applications for summer jobs. Students can also enroll in free vocational courses that offer a complete program in entry-level skills training during the summer. These courses include typing, carpentry and cabinet-making, auto mechanics, and computer programming.

PARENTAL INVOLVEMENT

--By the end of the project period, parents of children in the program will demonstrate greater involvement in the activites of the program as measured by a 50 percent increase in attendance at meetings of the Advisory Council.

--By the end of the project period, 25 percent of parents of children in the program will demonstrate greater awareness of career alternatives as measured by attendance at a minimum of one Career Workshop sponsored by the program.

Meetings of the parents' advisory council were held bimonthly, and the attendance rate improved by greater than 50 percent. Thirty-two parents attended the last meeting, whereas attendance at the project's outset was 12 to 15. The school also offered an adult education program that enabled parents to take E.S.L. courses at a cost of $50 per term, and possibly to obtain the Graduate Equivalency Diploma by attending classes at the Jamaica Learning Center. Program parents also participated in the class visitation program and career assembly.

MAINSTREAMING

--By the end of the project period, 15 percent of program students will have achieved functional bilingualism as demonstrated by their transfer to a complete English language instruction program.

--By the end of the project period, 50 percent of program students will have been partially mainstreamed as evidenced by a school program containing at least one mainstream course.

Data show that the program has achieved the first objective in this area. The program objective had been based on a target population of 200. Twenty-five students transfered to a complete English language instructional program from 1983 to June 1985. The projected number for the 1985-86 school year is 10 students. Therefore, by June 1986, 18 percent of the program students will have achieved functional bilingualism and will have transferred to a complete English language program.

The second objective was achieved in both the fall and spring: 55 percent of the program students were enrolled in mainstream mathematics classes.

IV. CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

In its second year of operation, Project CERCA continued to make satisfactory progress toward achieving its aims. Following a well-established tradition of providing support for bilingual education at Flushing High School, Project CERCA has served a target population of 200 Hispanic students, most of them LEP. The presence of a licensed bilingual guidance counselor indicates that the needs of the school's growing Hispanic LEP population are being served. Close, personal attention from the experienced bilingual program staff, peer tutoring (with paid Hispanic honor students serving as role models), and other unique features contribute to the program's success. High attendance and low dropout rates indicate high levels of student satisfaction with the program. A strong sense of pride, hope, and accomplishment is evident in that program students view their ability to graduate with a high school diploma as a realistic goal.

The program's strenghths lie in its wide selection of course offerings that aim to instill career awareness; the preparation it gives students for using bilingual skills; and its commitment to include such technological advances as the METRO-Guide service system within the sphere of services and experiences available to program students.

With a slight change of scope and some budget modifications, the program has been approved for continuation of funding through its next and final year. Project CERCA has enhanced bilingual students' high school experiences; it has provided the means for its students to achieve academic excellence and to be prepared for the world of work.

RECOMMENDATIONS

Based on the findings in this report, the Office of Educational Assessment makes the following recommendations:

That the project continue its recruitment efforts to find a certified bilingual science teacher.

That consideration be given to hiring an additional staff member to serve as a bilingual grade advisor, a function now performed by the bilingual guidance counselor;

That the A.P. of Foreign Languages/E.S.L./Bilingual Education monitor more closely the proportions of languages used for instruction in content-area classes. She might work with teachers individually to assist them in implementing a gradual increase in the use of English as students advance in level.

V. APPENDICES

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APPENDIX A

Staff Characteristics: Professional and Paraprofessional Staffs

Title/Function Note: Please do not include names	Percent Time to Each Function	Education (Degrees)	Is person licensed or certified for this title/function? (Y/N/NA)	Total Yrs. Experience Education	Years Relevant Experience Bilingual/E.S.L./ Foreign Language
A.P. For. Lang.	.4	B.A: SPANISH +30	YES	18years	16years
Teacher [illegible]	.8	B.A. SPANISH +21	YES	7 "	7 "
Teacher M.A. SPAN.	.6	B.A. SPANISH M.A. SPANISH +30	YES	29 "	11 "
Teacher Bil. Math.	.6	B.A. SPANISH	YES	15 "	9 "
Teacher Bil. Soc. Studies	.6	B.A. FRENCH M.A. FRENCH	YES	15 "	12 "
Teacher Bil. Soc. Studies	.2	B.A. SPANISH	NO	6 mos.	6 mos.
Teacher M.L.A.	.2	B.A. SPANISH M.A. SPANISH +30	YES	27 years	6 years
Teacher M.L.A.	.4	B.A. SPANISH	YES	9 "	4 "
Teacher Bil. Sci.	.2	B.A. SPANISH +21	NO	7 "	7 "
Teacher Bil. Sci	.4	B.A. FRENCH	NO	15 "	12 "
Teacher E.S.L.	1.0	B.A. M.A. & PHD. Linguistics	Yes	25 years	25 years
Teacher E.S.L.	1.0	B.A. Journalism M.A. Linguistics	Yes	29 "	18 "
Teacher E.S.L.	.6	B.A. Spanish	No	6 mos.	6 mos.
Teacher E.S.L.	1.0	B.A. FRENCH M.A. FRENCH	No	8 "	8 "
Teacher Lang. Arts Health	.2	B.A. PHYS. ED & HEALTH M.A. PHYS. ED.	Yes	18 years	2 years
Teacher Lang. Arts Typing	.2	B.A. [illegible]	Yes	20 "	3 "
Teacher Bus. Typing	.2	B.A. & M.A. BUS. EDUC.	Yes	16 "	2 "
Paraprofessional	1.0	B.A. SCI. EDUC.	NA	14 "	9 "
Paraprofessional	1.0	54 Credits EDUC. SCI.	NA	5 "	5 "
Bilingual Guidance Counselor	1.0	B.A. BIOLOGY M.A. COUNSELING	Yes	13 "	7 "
Teacher E.S.L. (TRANSITIONAL)	.2	B.A. ENGLISH	Yes	10 "	2 "

APPENDIX B

Courses in English as a Second Language (Fall)

Title and Level	Number of Classes	Number of Classes with Para-professional	Total Register	Title VII Register	Curriculum
E.S.L. 1 (Level I)	2	1	34	30	C/T
E.S.L. 2 (Level I)	2	2	42	31	C/T
E.S.L. 3 (Level II)	1	1	38	23	C/T
E.S.L. 4 (Level II)	2	2	9	18	C/T
E.S.L. 5 (Level III)	2	0	59	20	C/T
E.S.L. 6 (Level III)	1	0	40	19	C/T
E.S.L. 7 (Transitional)	2	0	30	10	C/T

C = NYC Curriculum T = Textbook Curriculum

APPENDIX B

Courses in English as a Second Language (Spring)

Title and Level	Number of Classes	Number of Classes with Para-professional	Total Register	Title VII Register	Curriculum
E.S.L. 1 (Level I)	2	2	29	27	C/T
E.S.L. 2 (Level I)	2	2	40	30	C/T
E.S.L. 3 (Level II)	2	2	38	21	C/T
E.S.L. 4 (Level II)	1	0	37	19	C/T
E.S.L. 5 (Level III)	2	0	57	16	C/T
E.S.L. 6 (Level III)	2	0	36	17	C/T
E.S.L. 7 (Transitional)	1	0	28	7	C/T

C = NYC Curriculum T = Textbook Curriculum

APPENDIX C

Courses in Native Language Arts, (Fall)

Title and Level	Number of Classes	Number of Classes with Para-professional	Total Register	Curriculum
Basic Spanish (I-1)	2	2	66	C/P
Intermediate Spanish (II-3)	3	2	69	C/P
Advanced Spanish (III-5)	2	1	104	C/P
Advanced Spnaish (IV-7)	1	0	29	C/P
Advanced Spanish (V-9)	1	0	17	C/P
Advanced Spanish (A.P.)	1	1	19	S

C = NYC Curriculum P = Program-developed Curriculum S = NYS Curriculum

APPENDIX C

Courses in Native Language Arts, (Spring)

Title and Level	Number of Classes	Number of Classes with Para-professional	Total Register	Curriculum
Basic (I-2)	2	0	66	C/P
Intermediate (II-4)	3	0	75	C/P
Advanced (III-6)	3	0	95	C/P
Advanced (IV-8/10)	1	0	24	C/P
Advanced (A.P.)	1	0	19	S

C = NYC Curriculum P = Program-developed Curriculum S = NYS Curriculum

APPENDIX D

Bilingual Content-Area Courses (Fall)

Title and Level	Number of Classes	Number Taught Out of License	Number of Classes with Para-professional	Total Register	Curriculum
Biology	1	1	1	26	C/T
General Science	2	2	0	42	C/T
Fundamental Mathematics	2	0	2	54	C/P
Pre-Algebra	1	0	0	15	C/P
Civics	2	0	0	39	C/P
American History	1	0	0	30	C/T
World History	1	1	0	28	C/T

C = NYC Curriculum P = Program-developed Curriculum T = Textbook Curriculum

APPENDIX D

Bilingual Content-Area Courses (Spring)

Title and Level	Number of Classes	Number Taught Out of License	Number of Classes with Para-professional	Total Register	Curriculum
Biology	1	1	0	28	C/T
General Science	2	2	0	44	C/T
Fundamental Mathematics	2	0	2	53	C/P
Pre-Algebra	1	0	0	14	C/P
Civics	2	0	1	42	C/P
World History	1	1	1	28	C/T
Economics	1	0	0	30	C/T

C = NYC Curriculum P = Program-developed Curriculum T = Textbook Curriculum

APPENDIX E

Specialized Courses (Fall)

Title and Level	Number of Classes	Total Register	Title VII Register
Lab Skills in Science	1	34	20
Global History Level I Level II Level III	2 6 2	34	Average: 10
Cartooning	1	34	10
Drafting	1	34	10
Wood Shop	1	34	10
General Shop	2	60	20
Language Arts Health	1	34	25
Language Arts Typing	3	80	60
Language Arts Music	1	34	25
Language Arts Art	1	34	25

APPENDIX E

Specialized Courses (Spring)

Title and Level	Number of Classes	Total Register	Title VII Register
Lab Skills in Science	1	34	21
Global History II	10	34	10
Cartooning	1	34	10
Drafting	1	34	10
Wood Shop	1	34	10
General Shop	2	68	20
Language Arts Health	1	34	25
Language Arts Typing	2	69	58
Language Arts Music	1	34	25
Language Arts Art	1	34	25